UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,302	09/10/2004	Takaaki Hashimoto	2004-1399A	4420

513 7590 01/19/2007

WENDEROTH, LIND & PONACK, L.L.P.
2033 K STREET N. W.
SUITE 800
WASHINGTON, DC 20006-1021

EXAMINER	
HRUSKOCI, PETER A	
ART UNIT	PAPER NUMBER
1724	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/507,302	HASHIMOTO ET AL.	
	Examiner	Art Unit	
	Peter A. Hruskoci	1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 November 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claims 1-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1 "treating" is vague and indefinite because it is unclear how this term further limits the claim. Claims 2-34 depend from claim 1. It is suggested that applicants amend claim 1 to include - , to oxidize and/or decompose organic or inorganic substances contained in the wastewater – before ".", in view of pages 1 and 12 of the instant specification.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6, 8, 9, 11-16, 21-25, 33, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiota et al. 6,797,184. Shiota et al. disclose (see col. 5 line 44 through col. 8 line 55, and col. 13 line 55 through col. 14 line 66) a method for treating waste water substantially as claimed. The claims differ from Shiota et al. by reciting that the pores of the catalyst have a specific radius. It is submitted that the teachings of Shiota et al. include the recited pore volume, and do not appear to be limited to a specific pore radius, or exclude the recited pore radius. It would have been obvious to one skilled in the art to modify the method of Shiota et al. by utilizing the recited pore radius, to aid in catalytically oxidizing the waste water. The specific pore radius utilized would have been an obvious matter or process optimization to one skilled in the art, depending on the specific waste water treated and results desired, absent a sufficient showing of unexpected results.

Claims 7, 17-20, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiota et al. as applied above, and further in view of Harada et al. 4,699,720. The claims differ from Shiota et al. by reciting that catalyst is a crushed shape. Harada et al. disclose (see col. 5 line 15 through col. 6 line 65) that it is known in the art to utilize crushed catalyst fragments in the catalytic oxidation of waste water. It would have been obvious to one skilled in the art to modify the method of Shiota et al. by utilizing the recited crushed shape catalyst in view of the teachings of Harada et al., to aid in catalytically oxidizing the waste water.

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shiota et al. in view of Harada et al. as applied above, and further in view of Loew et al. 5,405,532. The claim differs from the references as applied above by reciting that the waste water is subjected to a membrane or adsorption pretreatment. Loew et al. disclose (see col. 1 line 53 through col. 3 line 41) that it is known in the art to utilize adsorption and membrane pretreatments in combination with catalytic oxidation, to aid in the purification of waste water. It would have been obvious to one skilled in the art to modify the references as applied above, by utilizing the recited pretreatment in view of the teachings of Loew et al., to aid in purifying the waste water.

Claims 10, 27-31, 33, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiota et al. as applied above, and further in view of Loew et al. 5,405,532. The claims differ from Shiota et al. as applied above by reciting that the waste water is subjected to a membrane or adsorption pretreatment. Loew et al. disclose (see col. 1 line 53 through col. 3 line 41) that it is known in the art to utilize adsorption and membrane pretreatments in combination with catalytic oxidation, to aid in the purification of waste water. It would have been obvious to

one skilled in the art to modify Shiota et al. as applied above, by utilizing the recited pretreatment in view of the teachings of Loew et al., to aid in purifying the waste water.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-6, 8, 9, 11-16, 21-25, 33, and 34 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,797,184 Shiota et al.. Although the conflicting claims are not identical, they are not patentably distinct from each other because the method steps recited in the instant claims appear to be fully encompassed by the claims of the patent.

Claims 7, 17-20, and 26 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,797,184 in view of Harada et al. 4,699,720. The claims differ from the claims of Shiota et al. by reciting that catalyst is a crushed shape. Harada et al. disclose (see col. 5 line 15 through col. 6 line 65) that it is known in the art to utilize crushed catalyst fragments in the catalytic oxidation of waste water.

It would have been obvious to one skilled in the art to modify the method recited in the claims of Shiota et al. by utilizing the recited crushed shape catalyst in view of the teachings of Harada et al., to aid in catalytically oxidizing the waste water.

Claim 32 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,797,184 in view of Harada et al. as applied above, and further in view of Loew et al. 5,405,532. The claim differs from the references as applied above by reciting that the waste water is subjected to a membrane or adsorption pretreatment. Loew et al. disclose (see col. 1 line 53 through col. 3 line 41) that it is known in the art to utilize adsorption and membrane pretreatments in combination with catalytic oxidation, to aid in the purification of waste water. It would have been obvious to one skilled in the art to modify the references as applied above, by utilizing the recited pretreatment in view of the teachings of Loew et al., to aid in purifying the waste water.

Claims 10, 27-31, 33, and 34 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,797,184 in view of Loew et al. 5,405,532. The claims differ from the claims of Shiota et al. as applied above by reciting that the waste water is subjected to a membrane or adsorption pretreatment. Loew et al. disclose (see col. 1 line 53 through col. 3 line 41) that it is known in the art to utilize adsorption and membrane pretreatments in combination with catalytic oxidation, to aid in the purification of waste water. It would have been obvious to one skilled in the art to modify the claims of Shiota et al. as applied above, by utilizing the recited pretreatment in view of the teachings of Loew et al., to aid in purifying the waste water.

Applicants argue that the use of Shiota et al. as prior art against the present invention can be overcome by establishing common ownership as shown by the recorded Assignment documents for each of the present application and Shiota et al. It is submitted that common ownership or assignment must be shown to exist at the time the invention of the instant application was made, in accordance with MPEP 706. A statement of present common ownership is not sufficient.

Claim 1 properly written to overcome the above 35 USC 112 rejection, would be allowable, upon the filing of proper evidence of common ownership and a proper terminal disclaimer.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter A. Hruskoci whose telephone number is (571) 272-1160. The examiner can normally be reached on Monday through Friday from 6:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Peter A. Hruskoci
Primary Examiner
Art Unit 1724

1/10/07